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**Search Results -**

Terms	Documents
perchloric acid and L7	0

**Database:**

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**Search:**

L10

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**DATE: Monday, November 04, 2002**   [Printable Copy](#)   [Create Case](#)
**Set Name**   **Query**  
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 result set
*DB=USPT; PLUR=YES; OP=ADJ*

L10   perchloric acid and L7  
L9   hydrogen peroxide and L7  
L8   oxidant and L7  
L7   L6 and ph  
L6   L5 and distill\$5  
L5   L4 and neutraliz\$5  
L4   L3 and caprolactam  
L3   3859335.pn.

0   L10  
 0   L9  
 0   L8  
 1   L7  
 1   L6  
 1   L5  
 1   L4  
 1   L3

*DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ*

L2   (3524892| 3859335| 4052441| 5900506)! [pn]  
L1   6063958.pn.

10   L2  
 2   L1

**END OF SEARCH HISTORY**

 **PALM INTRANET**Day : Monday  
Date: 11/4/2002  
Time: 09:55:48**Inventor Name Search Result**

Your Search was:

Last Name = CHOU

First Name = SIEN-CHUN

Application#	Patent#	Status	Date Filed	Title	Inventor Name
<u>10047835</u>	Not Issued	030	01/14/2002	METHOD FOR RECOVERING AND PRODUCING C4-C6 DICARBOXYLATE FROM ALKALINE WASTE SOLUTION GENERATED IN CAPROLACTAM PREPARATION PROCESS	CHOU, SIEN-CHUN

**Inventor Search Completed:** No Records to Display.**Search Another:  
Inventor****Last Name****First Name**

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=> s dicarboxylates  
L1 2615 DICARBOXYLATES

=> s caprolactam and oxidant and l1  
18135 CAPROLACTAM  
32508 OXIDANT  
L2 0 CAPROLACTAM AND OXIDANT AND L1

=> s oxidant and l1  
32508 OXIDANT  
L3 3 OXIDANT AND L1

=> d 1-3 ibib abs hitstr

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:390969 CAPLUS  
DOCUMENT NUMBER: 137:262656  
TITLE: Stereochemical and conformational consequences of the  
oxidation of 1,4-thiazane-3,5-**dicarboxylates**  
AUTHOR(S): Hutton, Craig A.; Jaber, Rania; Otaegui, Michelle;  
Turner, Jennifer J.; Turner, Peter; White, Jonathan  
M.; Bacskay, George B.  
CORPORATE SOURCE: School of Chemistry, The University of Sydney, 2006,  
Australia  
SOURCE: Journal of the Chemical Society, Perkin Transactions 2  
(2002), (6), 1066-1071  
CODEN: JCSPGI; ISSN: 1472-779X  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The stereoselectivity of the oxidn. of 1,4-thiazane-3,5-dicarboxylate  
derivs. to the corresponding sulfoxides and sulfones was found to be  
dependent on the type of **oxidant** used and the conformational  
preference of the substrate. Direct oxidants, such as sodium periodate,  
peroxides and peracids, preferentially react with the axial sulfur  
lone-pair, providing the axial S-oxide. Oxidn. with bromine-water yielded  
the epimeric equatorial S-oxide, presumably as a result of initial attack  
of the axial sulfur lone pair providing the axial bromosulfonium ion, with  
subsequent displacement of bromide by water leading to the equatorial  
S-oxide.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1996:747587 CAPLUS  
DOCUMENT NUMBER: 126:103958  
TITLE: Bismuth(III) carboxylates as a new class of oxidants:  
pyridinecarboxylates and arom. **dicarboxylates**  
in the oxidative cleavage of aryl epoxides and  
.alpha.-ketols  
AUTHOR(S): Coin, Christine; Zevaco, Thomas; Dunach, Elisabet;  
Postel, Michele  
CORPORATE SOURCE: Lab. Chimie Moleculaire, Univ. Nice-sophia-Antipolis,  
Nice, 06108, Fr.  
SOURCE: Bulletin de la Societe Chimique de France (1996),  
133(9), 913-918  
CODEN: BSCFAS; ISSN: 0037-8968  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Several Bi(III) carboxylates have been obtained through reaction of Bi2O3  
with various pyridinemono- or -dicarboxylic acids, and with phthalic acid.  
Thus, the tris-carboxylato complex Bi[qui(COO)]3 forms in the presence of  
quinaldic acid, while phthalic acid yields Bi[phthal(COO)2](OH)  
independently of the stoichiometry of the reaction. A Bi(III) diphenate,  
PhBi(diphen), was prepd. from BiPh3 and diphenic acid. These were all  
found to catalyze the oxidative C-C cleavage of styrene oxide and

.alpha.-hydroxyacetophenone to benzoic acid. This allowed to demonstrate that the bismuth-catalyzed oxidn. of styrene oxide to benzoic acid goes through the intermediate formation of (i) the .alpha.-ketol, PhCOCH<sub>2</sub>OH, which requires DMSO as the oxidant, and (ii) the ketoaldehyde, PhCOCHO, which results from Bi(III)-catalyzed dioxygen oxidn. of the ketol.

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:38520 CAPLUS

DOCUMENT NUMBER: 112:38520

TITLE: Preparation and calcium complexation of oxidized polysaccharides. II. Hydrogen peroxide as coreactant in the chlorite oxidation of dialdehyde glucans  
AUTHOR(S): Floor, M.; Hofsteede, L. P. M.; Groenland, W. P. T.; Verhaar, L. A. T.; Kieboom, A. P. G.; Van Bekkum, H.  
CORPORATE SOURCE: Lab. Org. Chem., Delft Univ. Technol., Delft, 2628 BL, Neth.

SOURCE: Recueil des Travaux Chimiques des Pays-Bas (1989), 108(10), 384-92

CODEN: RTCPA3; ISSN: 0165-0513

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of dialdehyde glucans (obtained from starch, amylose, amylopectin, maltodextrin, cellulose, and dextran by periodate glycol cleavage) were oxidized to the corresponding dicarboxy polysaccharides by the combined use of NaClO<sub>3</sub> and H<sub>2</sub>O<sub>2</sub> (two moles of each per mol dialdehyde moieties). As compared to the conventional method (using 6 mol of chlorite and no peroxide), this new procedure reduced oxidant costs by a factor of 2.5, avoided the evolution of toxic ClO<sub>2</sub>, and more selectively yielded dicarboxy polysaccharides of high mol. wt. with excellent Ca complexing properties. The products thus obtained were potentially attractive co-builders in phosphate-free detergents.

=> s oxidant and l1 and waste

32508 OXIDANT

311330 WASTE

L4 0 OXIDANT AND L1 AND WASTE

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

19.01

19.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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FILE 'REGISTRY' ENTERED AT 10:22:36 ON 05 NOV 2002

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STRUCTURE FILE UPDATES: 3 NOV 2002 HIGHEST RN 469858-87-5

DICTIONARY FILE UPDATES: 3 NOV 2002 HIGHEST RN 469858-87-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNnote 27, Searching Properties in the CAS Registry File, for complete details:

=> s dimethyl succinate/cn  
L5 1 DIMETHYL SUCCINATE/CN

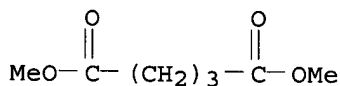
=> s dimethyl glutarate/cn  
L6 1 DIMETHYL GLUTARATE/CN

=> s dimethyl adipate/cn  
L7 1 DIMETHYL ADIPATE/CN

=> s l5 or l6 or l7  
L8 3 L5 OR L6 OR L7

=> d 1-3

L8 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2002 ACS  
RN 1119-40-0 REGISTRY  
CN Pentanedioic acid, dimethyl ester (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutaric acid, dimethyl ester (6CI, 7CI, 8CI)  
OTHER NAMES:  
CN DBE 5  
CN **Dimethyl glutarate**  
CN Dimethyl pentanedioate  
CN Methyl glutarate  
FS 3D CONCORD  
DR 111366-62-2  
MF C7 H12 O4  
CI COM  
LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHM, CSNB, DETHERM\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, PROMT, SPECINFO, TOXCENTER, ULIDAT, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

554 REFERENCES IN FILE CA (1962 TO DATE)  
20 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
555 REFERENCES IN FILE CAPLUS (1962 TO DATE)  
24 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

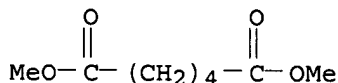
L8 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2002 ACS  
RN 627-93-0 REGISTRY  
CN Hexanedioic acid, dimethyl ester (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Adipic acid, dimethyl ester (6CI, 8CI)  
OTHER NAMES:  
CN DBE 6  
CN **Dimethyl adipate**  
CN Dimethyl hexanedioate  
CN Methyl adipate  
FS 3D CONCORD  
DR 111366-61-1  
MF C8 H14 O4  
CI COM  
LC STN Files: ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB, DETHERM\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE,

MSDS-OHS, NIOSHTIC, PIR, PROMT, RTECS\*, SPECINFO, TOXCENTR, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



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984 REFERENCES IN FILE CA (1962 TO DATE)

44 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

984 REFERENCES IN FILE CAPLUS (1962 TO DATE)

49 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L8 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2002 ACS

RN 106-65-0 REGISTRY

CN Butanedioic acid, dimethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Succinic acid, dimethyl ester (6CI, 8CI)

OTHER NAMES:

CN DBE 4

CN Dimethyl butanedioate

CN **Dimethyl succinate**

CN Methyl succinate

FS 3D CONCORD

MF C6 H10 O4

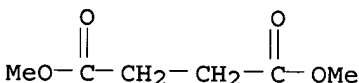
CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1188 REFERENCES IN FILE CA (1962 TO DATE)

37 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1188 REFERENCES IN FILE CAPLUS (1962 TO DATE)

44 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

18.26

37.48

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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FILE 'CAPLUS' ENTERED AT 10:25:16 ON 05 NOV 2002

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FILE COVERS 1907 - 5 Nov 2002 VOL 137 ISS 19  
FILE LAST UPDATED: 3 Nov 2002 (20021103/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> s 106-65-0/prep
      1188 106-65-0
      2929168 PREP/RL
L9      213 106-65-0/PREP
        (106-65-0 (L) PREP/RL)
```

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=> s 111366-61-1/prep
      2 111366-61-1
      2929168 PREP/RL
L10     0 111366-61-1/PREP
        (111366-61-1 (L) PREP/RL)
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=> s 111366-62-2/prep
      1 111366-62-2
      2929168 PREP/RL
L11     0 111366-62-2/PREP
        (111366-62-2 (L) PREP/RL)
```

```
=> s l9 and oxidant
      32508 OXIDANT
L12     1 L9 AND OXIDANT
```

```
=> s caprolactam and l12
      18135 CAPROLACTAM
L13     0 CAPROLACTAM AND L12
```

```
=> d l12 ibib abs hitstr
```

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1998:479504 CAPLUS  
DOCUMENT NUMBER: 129:124061  
TITLE: Pericarboxylic acid solutions with storage stability  
INVENTOR(S): Carr, Graham; James, Alun Pryce; Morton, Kelly Jane;  
Sankey, John Phillip; Lawton, Valerie  
PATENT ASSIGNEE(S): Solvay Interlox Ltd., UK  
SOURCE: PCT Int. Appl., 32 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9828267 A1 19970702 WO 1997-GB3461 19970116  
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9878728 A1 19980717 AU 1998-78728 19971216

AU 734381 B2 20010614

EP 946506 A1 19991006 EP 1997-949068 19971216

R: BE, DE, ES, FR, GB, IT, NL, SE, PT, FI

BR 9713781 A 20001024 BR 1997-13781 19971216

US 6274542 B1 20010814 US 1999-331395 19991102

PRIORITY APPLN. INFO.:

GB 1996-26637 A 19961221

WO 1997-GB3461 W 19971216

OTHER SOURCE(S): MARPAT 129:124061

AB Storage stable aq. acidic solns., often having a pH of up to 1 contg. an ester peracid and/or an acid peracid can be obtained by reacting a diester satisfying the general formula R1-O-CO-R2-CO-O-R3 (in which R1 and R3 each represents a alkyl group contg. from 1 to 4 carbon atoms which may the same of different and R2 represents an aliph. alkylene group optionally unsatd. which may be linear or branched contg. from 2 to 6 carbon atoms) with aq. hydrogen peroxide in the presence of an acid, such as sulfuric acid and permitting the compns. to progress towards equil. concns. Also claimed is the use of above compn. as a disinfectant. By starting with a diester, perhydrolysis generates an ester peracid which is a particularly effective peracid. The process can be controlled to produce solns. contg. a high peracid content and within a wide range of ratios of ester peracid to acid peracid. Percarboxylic acids are absent of off-putting odors and applied in a wide range of uses such as oxidants, stain removers, and microbicides. Thus, 106 g DBE (a mixt. of the di-Me esters of succinic, glutaric, and adipic acids in 16, 58, and 26%, resp., Dupont) was stirred at .apprx.22.degree. with 594 g demineralized H2O and 10 g H2SO4 and 287 g 35 wt% aq. H2O2 was introduced slowly into the stirred mixt. while keeping the soln. temp. at .apprx.20.degree.. The resulting soln. contained a significant concn. of monoperacids derivs. of succinic, glutaric, and adipic acids as the predominant peracid species and residual H2O2. After adding 0.12 g p-hydroxybenzoic acid, the soln. was stored in a screw capped high d. polyethylene bottle in a dark temp. controlled enclosure to show the available oxygen in the soln. 98.6 and 97.5% after 4 and 8 wk, resp. Antibacterial activity of similarly prepd. peracid compns. against Staphylococcus aureus and Escherichia coli was given.

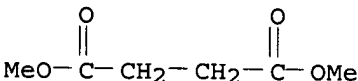
IT 106-65-0DP, Dimethyl succinate, reaction product with aq. hydrogen peroxide

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. of percarboxylic acid solns. by reaction of dicarboxylic acid diesters with hydrogen peroxide and storage stability)

RN 106-65-0 CAPLUS

CN Butanedioic acid, dimethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT